TRANSACTIONS

OF THE

PHILADELPHIA ACADEMY OF SURGERY.

Stated Meeting, held March 4, 1907.

The President, Dr. John B. Roberts, in the Chair.

FRACTURE OF ANATOMICAL NECK OF THE HUMERUS, WITH DISLOCATION.

Dr. W. W. Keen reported this case with exhibition of specimen and skiagraphs. See page 938.

FRACTURE OF THE GREATER TUBEROSITY OF THE HUMERUS.

Dr. W. W. Keen reported this case, showing numerous skiagraphs and plates of this and similar cases. See page 938.

Dr. Gwilym G. Davis mentioned a case of fracture of the anatomical neck of the humerus which he saw many years ago when a resident in Dr. Morton's service. The patient was an old person who had a fracture through the anatomical neck, with dislocation of the fragment into the axilla, under the pectoral muscle. An incision was made along the border of this muscle and through this the fragment was removed.

Dr. James K. Young has seen recently in consultation one case of fracture of the greater tuberosity of the humerus, the X-ray of which he exhibited, in which the diagnosis was made by him from the clinical symptoms. It was an illustration of the point mentioned by Dr. Keen regarding the manner in which this fracture is received, the patient falling with the arm high in the air. A second feature of this case, and a point not mentioned by Dr. Keen, was the peculiar position of the resulting ecchymosis, which followed the biceps tendon and appeared down the front of the arm almost to the elbow. The disability following the acci-

dent was attributed by Dr. Young to injury of circumflex nerve.

Dr. George G. Ross said that at the German Hospital they see a number of fractures of the anatomical neck of the humerus. They treat them by applying ordinary dressings without resort to operative procedures. This fracture is not uncommon and the ultimate results are usually good. One man of forty-five years received the fracture three weeks ago, is now having passive motion applied, and can bring the arm almost to a right angle.

Dr. Lee said he had been three of the cases which Dr. Montgomery skiagraphed. He also saw Dr. Keen's case when the man first came to the receiving ward and also after reduction. Crepitus persisted and the provisional diagnosis was fracture of the coracoid process.

Dr. Keen, in closing, said in reference to fracture of the anatomical neck, that operation is not needed if the fracture extend outside the capsule, unless the raw surfaces of the bone are reversed and cannot be brought in contact, or unless the separation be entirely intracapsular and the fragment therefore be deprived of all blood supply. There was no hope of union in his case, without operation, as the fragment was displaced at a distance and was also reversed. He did not agree with Dr. Ross that the accident is a common one. Dr. Young's statement regarding the ecchymosis in his case is an interesting observation. In Dr. Keen's case there was no ecchymosis present, but when present its extension down the biceps would be of diagnostic value.

FRACTURE OF FEMUR AND PELVIS.

Dr. Robert G. Le Conte presented a boy of eight who on January 1, 1907, was caught on the fender of a trolley car and rolled along the ground, it being uncertain as to how much weight came upon him. He sustained a fracture of the upper third of the left femur, a fracture through the left ilium just to the outer side of the sacro-iliac joint (Fig. 1), a wound of the perineum extending to but not opening the membranous urethra, a scalp wound and general bruises over the entire body. Now, about ten weeks after the injury, the boy is able to walk well, although he does so with some limp. As the anterior and posterior spines of the ilium of the left side are lower than those on the right, it has not been determined how much shortening, if any exists in the left leg.

GUNSHOT FRACTURES OF FEMUR AND FOREARM.

DR. LE CONTE presented a man of twenty-six who was shot on September 1, 1906, with a 38-calibre revolver, in the lower part of the left thigh and also in the left forearm near its middle. The thigh was fractured very obliquely; the line of fracture ran from below upward and from the outer anterior aspect inward for a distance of nearly 3 inches. The long, thin upper fragment had penetrated the knee joint and interfered markedly with motion. Four weeks ago an incision was made on the outer aspect of the thigh and 1½ inches of the spike-like portion of the upper fragment was removed sub-periosteally without opening the knee joint. There was firm union of the fragments. The two skiagraphs (Figs. 2 and 3), before and after operation, show very well the portion of bone removed. Motion at the knee joint has now increased to a little over a right angle and he walks without a limp.

The bullet which passed through the forearm fractured the radius into three pieces, the middle piece or fragment being 2½ inches long and having been driven into the muscles on the radial side of the forearm. The lower fragment had been driven toward the ulna and had become united to it. There was entire absence of pronation and supination, and flexion and extension at the wrist joint was almost gone. From the skiagraph (Fig. 4), which shows the position of the fragments accurately, and also small particles of lead embedded in the muscles, it would look as if the fragments were separated by the interposition of muscular tissue and that no union had taken place.

A long dorsal incision was made the same day that the femur was operated upon, and on exposing the fragments of the radius it was found that the upper and middle fragments were firmly united, while the lower one had grown fast to the ulna. This latter fragment was separated from the ulna and brought into line with the rest of the radius, drilled and wired to the middle fragment (Fig. 5). Now he has nearly 50 per cent. of pronation and supination and quite 50 per cent. of flexion and extension at the wrist.

COMPOUND FRACTURE OF RADIUS AND ULNA.

DR. LE CONTE presented, also, a man aged thirty-two, who sixteen months ago had his right forearm caught in a bread mixer,

FIG. 1.

CASE I.—Showing fracture of the left thigh and left ilium.

Case II.—Gunshot fracture of the left femur, before operation.

Fig. 3.

Case II.—The same after removal of the spike-like process.

FIG. 4.

CASE II.—Gunshot fracture of left forearm, before operation.

FIG. 5.

CASE II.—The same after wiring.

FIG. 6.

CASE III.—Deformity following compound fracture of the radius and ulna.

Case III.—The same after correction.

and sustained a compound fracture of the radius and ulna about 1½ inches above the wrist joint, with a long oblique fracture of the external condyle of the humerus. As a result of this injury the hand was deflected to the ulnar side, between 45 and 50 degrees, rendering it practically useless (Fig. 6). At the elbow joint the motion was very good, although the deformity was marked. Two and a half weeks ago an incision was made on the dorsum of the radius and a second over the outer aspect of the ulna. With considerable difficulty the lower fragments of the radius and ulna were loosened from their bed of fibrous tissue and brought into a straight line, drilled and wired (Fig. 7). It is too early yet to foretell the degree of usefulness which will return to the hand.

Dr. Richard H. Harte, speaking of the results obtained in the forearm first described, said that he saw the operation and at first it appeared impossible to obtain any satisfactory result. There seemed to be multiple fractures and the wound appeared to contain a particle of lead. It seemed as though resection of the fragment would be necessary, but a good result was obtained without.

The other patient was shown by Dr. Harte to the students at the University. Deformity was extreme, being greater than he had ever before seen at the lower end of the radius. The part looked much as though it was the site of an enormous osteo-sarcoma. A great deal of exuberant callus was removed and the indications are that good results will be secured.

Dr. George G. Ross mentioned a case of fracture of the pelvis in a man caught between a swinging crane and a pillar, and rolled around the latter. In addition to the fracture there was rupture of the posterior wall of the bladder. A catheter in the bladder discharged only blood for twenty-four hours and then bloody urine. During one day 96 ounces were passed. After four or five days the man was operated upon. The ascending ramus of the pubis was fractured on both sides and the broken ends protruded into the bladder. It was impossible to reduce them. The man died of sepsis a few days later.

PARTIAL GASTRECTOMY WITH REPORT OF TWO CASES.

Dr. Charles H. Frazier read a paper with the above title, for which see page 950.

DR. JOHN B. DEAVER said he was not surprised at Dr. Frazier's statement regarding the comparatively few cases of carcinoma recognized in the medical dispensaries. As long as dispensaries are run in the slipshod manner they now are, there will be few cases referred from them. It is disappointing to think of the way these dispensaries are conducted, the patients being rushed through, this one ordered prescription No. 4, that one No. 6, and so on. At the German Hospital, Dr. Deaver diagnoses a fair number of cases of ulcer and cancer of the stomach which are sent to him, and no doubt his medical colleagues could do the same under proper circumstances.

He does not agree with Dr. Frazier as to the general value of the Murphy button. He has seen mishaps with it in cases of enterostomy, in spite of the fact that the nurse in charge was always careful to see that mechanically the buttons were all right. He has long since discontinued its use, which can well be done when there are still the various forceps and the needle and thread. The results in stomach resections in Dr. Deaver's hands are good.

What is more needed at the present moment than anything else is that either an earlier diagnosis be made, or, in the light of suspicious symptoms, abdominal incision recommended.

DR. W. W. KEEN, in speaking of the findings of the pathologist in Dr. Frazier's first case, said that when there was a difference between the pathologist's findings and the clinical history he was inclined to be guided by the latter in preference to the former, for the pathologist as well as the clinician makes mistakes. In Dr. Frazier's case where the microscope showed no carcinoma, in the speaker's opinion the clinical history pointed to the fact that carcinoma would have developed, and he showed good judgment in doing a pylorectomy.

In carcinoma of the stomach operation is often too long delayed. Adhesions often prohibit operation in cases where there is a palpable tumor. Dr. Frazier was fortunate in his first case in not finding adhesions so extensive as to prevent removal. In general, if in three or four months a gastric disorder becomes no better under careful treatment, abdominal section should be made. In this way carcinoma will be detected early before there is a palpable tumor, and relatively good results will be secured.

DR. JOHN H. GIBBON, in speaking of the differential diagnosis between indurated ulcer and carcinoma of the stomach, said

there is nothing more difficult unless it is deciding whether to do a gastro-enterostomy when there is an ulcer at the pylorus. There are no rules for these cases. In a personal case reported several years ago there was a palpable mass and he expected to find a cancer. He found a mass in the stomach and did a gastro-enterostomy, intending to do later a resection. The woman at once improved and to-day is well, the lesion evidently being ulcer instead of a cancer. Another case was exactly the opposite, cancer being present when the diagnosis of indurated ulcer had been made. The case, however, was inoperable and the patient died, there being cancer of the suprarenals also. Moynihan states that differentiating points are hardness and glandular involvement in cancer and more extensive adhesions in ulcers.

Dr. Gibbon does not agee with Dr. Frazier that partial gastrectomy is no more dangerous than posterior gastro-enterostomy; hence the importance of differentiating between ulcer and carcinoma. He also has had trouble with the Murphy button, particularly in a case of end-to-end anastomosis of the large bowel in which ulceration due to the button was followed by abscess behind the colon and death in five weeks. Murphy is now using an oblong button with the intestinal side larger and heavier than the other in order to prevent the accidents caused by the older form; but this is not appreciated by many, especially by foreign surgeons. Still, trouble may occur with the new pattern.

A palpable mass in the stomach does not always mean carcinoma, as shown by the presence of the ulcer in his case. Robson has shown that where there is a palpable mass one is justified in operating, although under such circumstances one feels that he is operating too late. Dr. Gibbon agrees with Dr. Frazier that in cases of cancer partial gastrectomy is preferable to posterior gastro-enterostomy. Although the latter gives great relief for a few weeks, improvement lasts only a short time.

Dr. Gwilym G. Davis said the referring of but few cases of early gastric cancer is not entirely the fault of the out-patient medical men, but is due partly to force of circumstances. Typhoid fever is so rife that admission to other cases is denied and hence chronic stomach affections that should be carefully studied have to be turned away. Dr. Davis agrees with those who eschew the use of the Murphy button, as he came to grief with its employment some time ago in an end-to-end anastomosis of the small intestine.

If in a stomach lesion he believes he is dealing with cancer a radical operation is performed; if the lesion is regarded as an ulcer, he performs posterior gastro-enterostomy as being less dangerous than the former.

DR. FRAZIER, in closing, mentioned a case somewhat similar to that of Dr. Gibbon's, as an example of the improvement and apparent restoration of health which may follow gastro-enterostomies. The patient was operated upon about four years ago for a tumor at the pyloric end of the stomach, which was believed to be carcinoma. He was very much emaciated at the time, owing chiefly to obstructive symptoms. A posterior gastro-enterostomy was done and the patient rapidly gained in strength and weight, and was apparently wholly restored to health; consequently the lesion is believed to have been an ulcer, although there was a distinct mass which was quite palpable before the operation.

As to the terms partial gastrectomy and pyloroctomy, he thought that the term pyloroctomy might now be employed to include not only resection of the pylorus, but resection of the pyloric portion of the stomach, that is, up to the Hartmann-Mikulicz line.

The unfortunate results in the second case of gastrectomy may not have been due to the use of a Murphy button. It is only fair to say that the button used in this particular case was found upon its removal at the autopsy to have been imperfect in its construction and mechanism. Whether or not this defect was responsible for the accident it is impossible to say, although perhaps it would be only fair to give the button the benefit of the doubt.